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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,506

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Peter James Branton

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EXAMINER

NGUYEN, PHU HOANG

ART UNIT

PAPER NUMBER

1747

NOTIFICATION DATE

DELIVERY MODE

04/28/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTOmail@MiddReut.com

Office Action Summary	Application No. 10/563,506	Applicant(s) BRANTON ET AL.	
	Examiner PHU H. NGUYEN	Art Unit 1747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/23/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/23/2010 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 41-56, 58-61 and 63-75 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 41 contains the phrase: "by barrier means" on the 2nd line 2nd and again on 4th line of the instant claim 41, it is unclear which barrier means the Applicant referring when the Applicant subsequently claims "the barrier means" in the instant claim 41 and dependent claims.

The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

Claim 60 is rejected under 35 U.S.C. 112, fourth paragraph, as not further limiting the subject matter claimed in the claim to which it refers. Claim 41 already recites first and second portions are in coaxial alignment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 41-48 and 56-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crellin (U.S Patent No. 3894545) in view of Rose (U.S Patent No. 4846199).

Regarding claims 41 and 43-44, Crellin discloses a smoke filter comprising a first portion (portion of 9', fig. 2) and a second portion (9, fig. 2), said first portion being closed against particulate material flow by barrier means (by reference sign 10, fig. 2) and said second portion providing a through path for particulate material flow, said first portion and said second portion being separated by barrier means (by reference sign 6, fig. 2), said barrier means closing said first portion and said barrier means separating said first and second portions being formed from porous material (vapour porous membrane) (Abstract and claim 1), wherein said first portion forms a core and said second portion forms an outer annulus of core-annulus arrangement and wherein said first and said second portions are in coaxial alignment. Crellin discloses that the carbon in the smoke filter is protected against the deposition of smoke particles while allowing

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the adsorption of vapors (column 1, lines 19-26), therefore Crellin suggests the vapour-porous material has pore small enough to prevent tobacco smoke particles from flowing through. Rose discloses normal cigarette smoke particle sizes may be in range of about 0.2 microns (column 10, lines 35-36). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to size the pores of the vapour porous material of Crellin to be less than about 0.1 microns to ensure smoke particles from passing through the vapour porous material.

Regarding claim 42, Crellin discloses the barrier means is porous to the vapour phase of the smoke (column 1, lines 19-26).

Regarding claims 45-48, Crellin discloses the absorbent used is granular carbon. (column 3, lines 1-5).

Regarding claims 56-57, in addition to the features discussed above for claim 41, the upstream portion of 9' can be interpret as a third portion of the filter of Crellin which also comprises adsorbent.

Regarding claims 58-59, Crellin discloses the second portion of said filter comprises a conventional smoke filtration material such as cellulose acetate (column 6, lines 32-36).

Regarding claims 60-61, Crellin discloses the first and second portions are in co-axial alignment and the first portion forms an inner core and said second portion forms an outer annulus of a core-annulus arrangement (see fig. 2).

Regarding claim 62, in addition to the features discussed above for claim 1, Crellin also discloses an alternate embodiment according to claim 62, wherein the

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second portion forms a core and the first portion forms an outer annulus of a core annuls arrangement and wherein the first and second portions are in coaxial alignment (see fig. 1 of Crellin).

Regarding claims 63-64, Crellin further discloses an alternative embodiment wherein the first portion is formed of a number of discrete, substantially longitudinal segments arranged in coaxial alignment within said second portion of said filter and each segment of said first portion is separated from said second portion by barrier means (see fig. 8).

Regarding claims 65-67, Crellin discloses the first portions is closed to the through flow of particle phase material at the upstream (see upstream plug 10, fig. 2), furthermore it would have been obvious that the material of the plug 10 can be cellulose acetate to prevent particulate flow through the carbon section (column 1, lines 65-68).

Regarding claim 68-71, Crellin discloses the smoke filter further comprises additional portions of conventional smoke filtration material (cellulose acetate) coaxially and in end-to-end abutment with first and second portions of the filters (by reference sign 2, fig. 2)

Regarding claim 72, Crellin discloses a smoking article with a rod of smoking material wrapping in a wrapper (by reference sign 4, fig. 2).

Regarding claims 73-75, smoking material conventionally includes flavorants in encapsulated or free form.

Claim 49-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crellin (U.S Patent No. 3894545) in view of Rose (U.S Patent No. 4846199) in view of

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Bowen et al. (U.S. Pub. No. 20020002979). It is obvious to substitute a general adsorbent such as carbon with more selective adsorbent in combination with catalyst in order to reduce any impact it may have the flavor of the cigarette as taught by Bowen (paragraphs 15, 56).

Response to Arguments

Applicant's arguments with respect to claims 41-75 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHU H. NGUYEN whose telephone number is (571)272-5931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P.N 4/13/2011

/Christopher A. Fiorilla/
Chris Fiorilla
Supervisory Patent Examiner, Art Unit 1700